

BookletChart™



Woods Hole

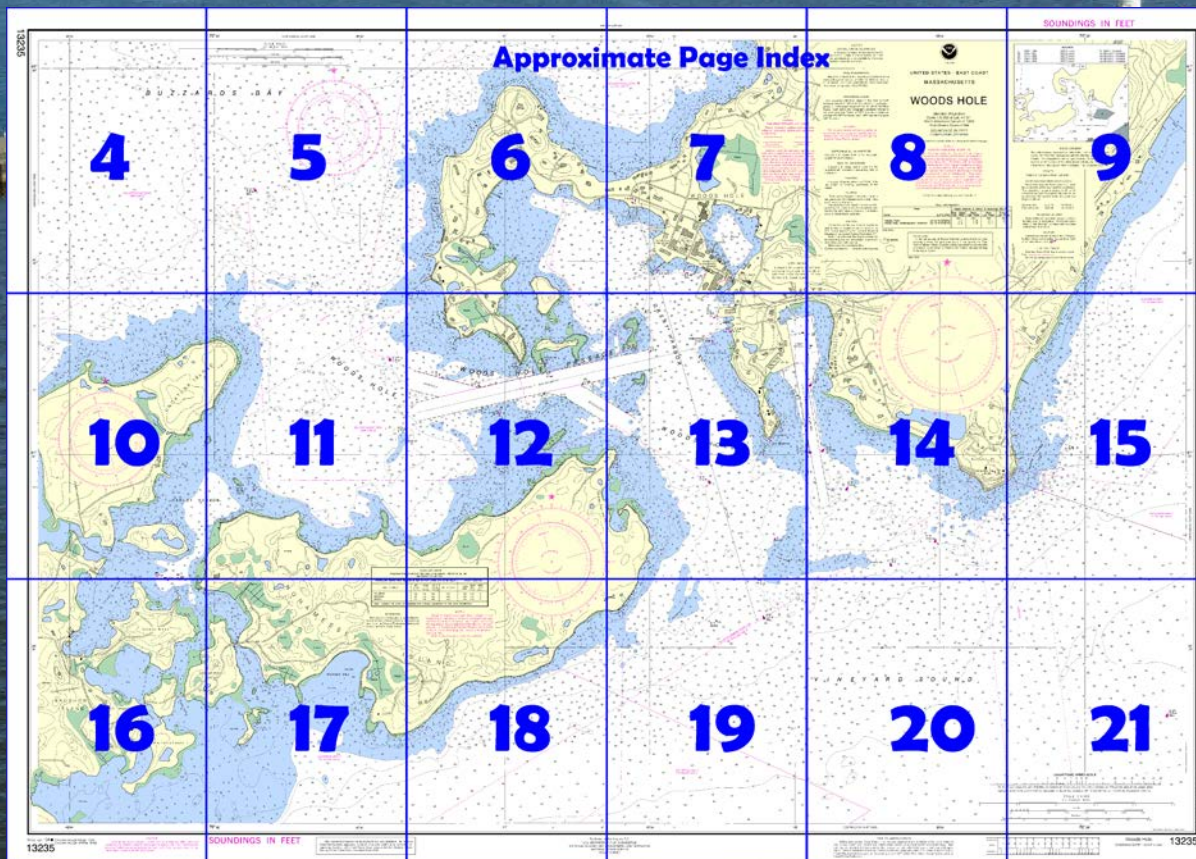
NOAA Chart 13235

A reduced-scale NOAA nautical chart for small boaters

When possible, use the full-size NOAA chart for navigation.



- Complete, reduced-scale nautical chart
- Print at home for free
- Convenient size
- Up-to-date with Notices to Mariners
- Compiled by NOAA's Office of Coast Survey, the nation's chartmaker



Published by the
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Coast Survey
www.NauticalCharts.NOAA.gov
888-990-NOAA

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

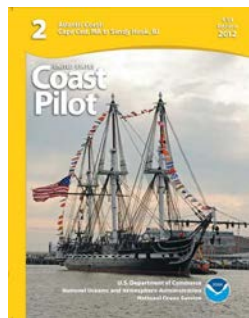
Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

For latest Coast Pilot excerpt visit the Office of Coast Survey website at <http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=13235>



(Selected Excerpts from Coast Pilot)

Woods Hole is that water area lying between the southwest tip of Cape Cod and Uncatena and **Nonamesset Island**, the easternmost of the Elizabeth Islands, with Buzzards Bay on the northwest and Vineyard Sound on the southeast; it includes Great and Little Harbors in the eastern part, and Hadley Harbor in the western part. Woods Hole is also the approach to the town of **Woods Hole** on the northeastern shore of Great

Harbor. The town is a busy commercial center and a transshipping point for passengers and freight to and from Nantucket and Martha's Vineyard. During the summer it is an active resort and frequently a port of call by yachts passing through to Vineyard Sound or Buzzards Bay. There is considerable waterborne commerce in seafood products and general cargo.

Channels.—Woods Hole Passage, a dredged section through the northern part of Woods Hole, connects Vineyard Sound and Great Harbor with Buzzards Bay, and consists of **The Strait** and a spur channel known as the **Branch** at the western end of The Strait, and **Broadway**, the southerly entrance to The Strait from Vineyard Sound. A Federal project provides for channel depths of 13 feet. (See Notice to Mariners and latest edition of charts for controlling depths.) The northerly entrance from Great Harbor into The Strait is preferred over Broadway with its sharp turn, which is difficult in strong currents, especially for low-powered vessels and vessels under sail.

The entrance to **Great Harbor** from Vineyard Sound, between Great Ledge and Nonamesset Shoal, has depths of over 20 feet. A **344°** lighted entrance range leads into the harbor from Vineyard Sound to the wharves at Woods Hole in Great Harbor. A lighted bell buoy marks the entrance and lighted and unlighted buoys mark the channel. When entering on the range, mariners should guard against the current from Buzzards Bay, which has a tendency to set vessels eastward. These channels are marked by buoys and lights, but extreme caution and slack water are required to safely navigate them with drafts greater than 8 feet. Mariners entering from Buzzards Bay should keep in mind that the buoys are colored and marked for passage from Vineyard Sound to Buzzards Bay.

Anchorage.—(See **110.1** and **110.140 (c) and (d)**, chapter 2, for limits and regulations of the deepwater anchorages in the vicinity of Woods Hole.) An anchorage about 0.2 mile square, with poor holding ground and irregular depths ranging from 19 to 62 feet, is at the head of Great Harbor. Shoals covered 5 to 9 feet are northwest of the anchorage.

Good anchorage in depths of 29 to 36 feet is also available about 200 yards northwest of the National Marine Fisheries Service's wharf. Small craft can find good anchorage in Little Harbor and Hadley Harbor.

Dangers.—Numerous ledges and shoals border the channel through Woods Hole. **Great Ledge**, an extensive rocky shoal awash at low water with a full northwest gale, lies between the entrances to Little and Great Harbors; it is marked by a buoy. **Coffin Rock**, eastward of Great Ledge and covered 5 feet, is marked by a lighted buoy 120 yards eastward of it.

Nonamesset Shoal, covered 10 feet, extends about 0.2 mile eastward from Nonamesset Island, at the entrance to Great Harbor. **Parker Flats** extend as much as 200 yards off the eastern shore of Great Harbor northward of Juniper Point. Most of these dangers are marked by buoys. Fringing the passage westward of Great Harbor are many other ledges and shoals. **Red Ledge**, grassy, and **Grassy Island**, with its surrounding ledge marked by a light, are on the western side of Great Harbor Channel. **Middle Ledge**, which uncovers 1 foot in places and is marked by buoys, is on the south side of The Strait. A ledge, awash at low water and marked by a light, is about 250 yards westward of Middle Ledge.

Hadley Rock, covered 5 feet, is some 500 yards west-southwestward of the light west of Middle Ledge. A rocky shoal area extends more than 0.3 mile westward of **Penzance Point**, the southern extremity of **Penzance**, which is the curving peninsula sheltering the west and northwest sides of Great Harbor. Most of the dangers adjoining the passage channel are marked by navigational aids.

Currents.—The velocity of the current is about 3.5 knots in The Strait southward of Penzance Point. (See the Tidal Current Tables for predictions.) Both the velocity of the current and time of slack water are affected by strong winds.

U.S. Coast Guard Rescue Coordination Center 24 hour Regional Contact for Emergencies

RCC Boston

Commander
1st CG District
Boston, MA

(617) 223-8555

Table of Selected Chart Notes

HEIGHTS
Heights in feet above Mean High Water.

Mercator Projection
Scale 1:5,000 at Lat. 41°31'

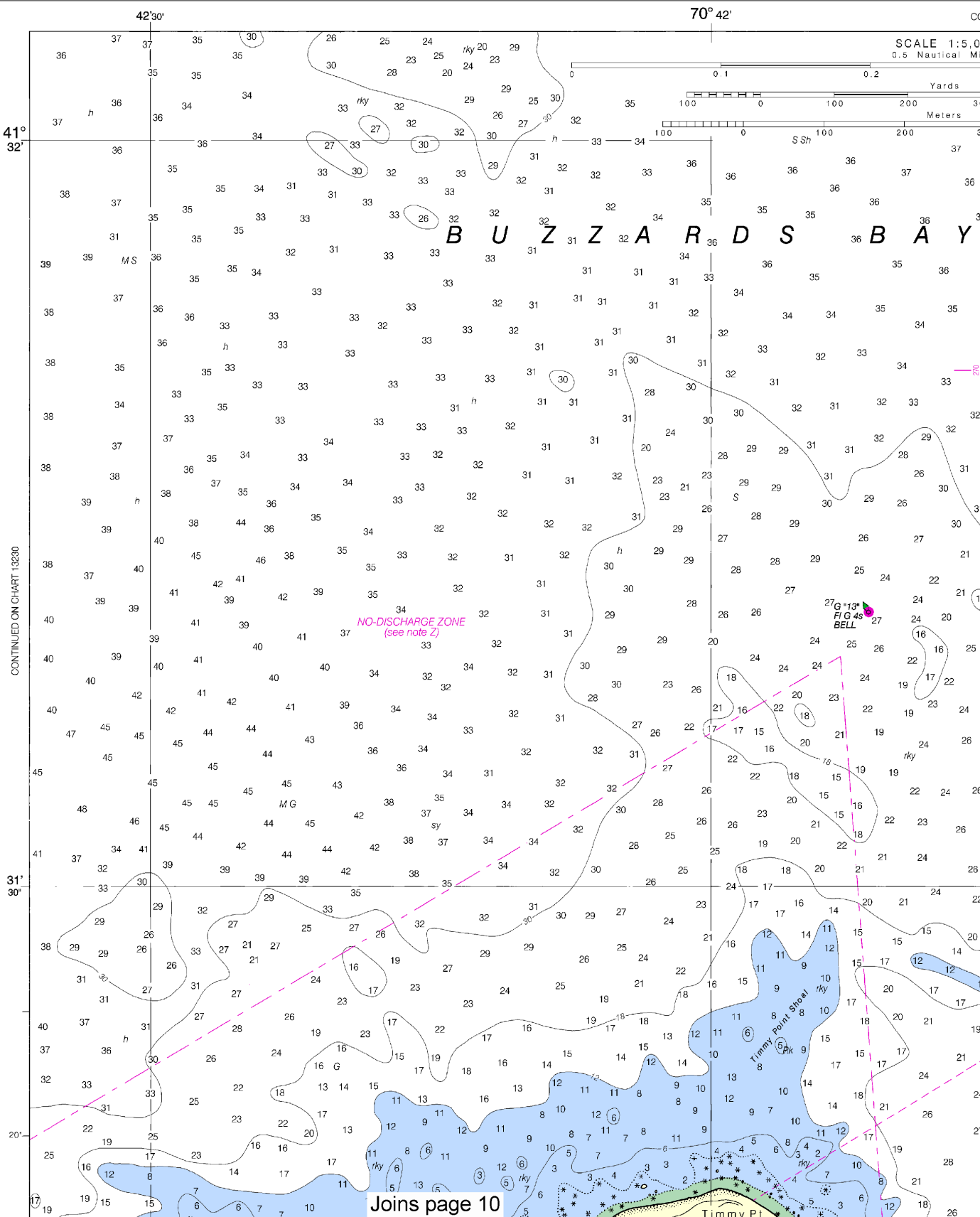
North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FEET
AT MEAN LOWER LOW WATER

AUTHORITIES
Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

COLREGS: International Regulations for Preventing Collisions at Sea, 1972.
Demarcation lines are shown thus: - - - - -

13235



CONTINUED ON CHART 13230

Joins page 10

4

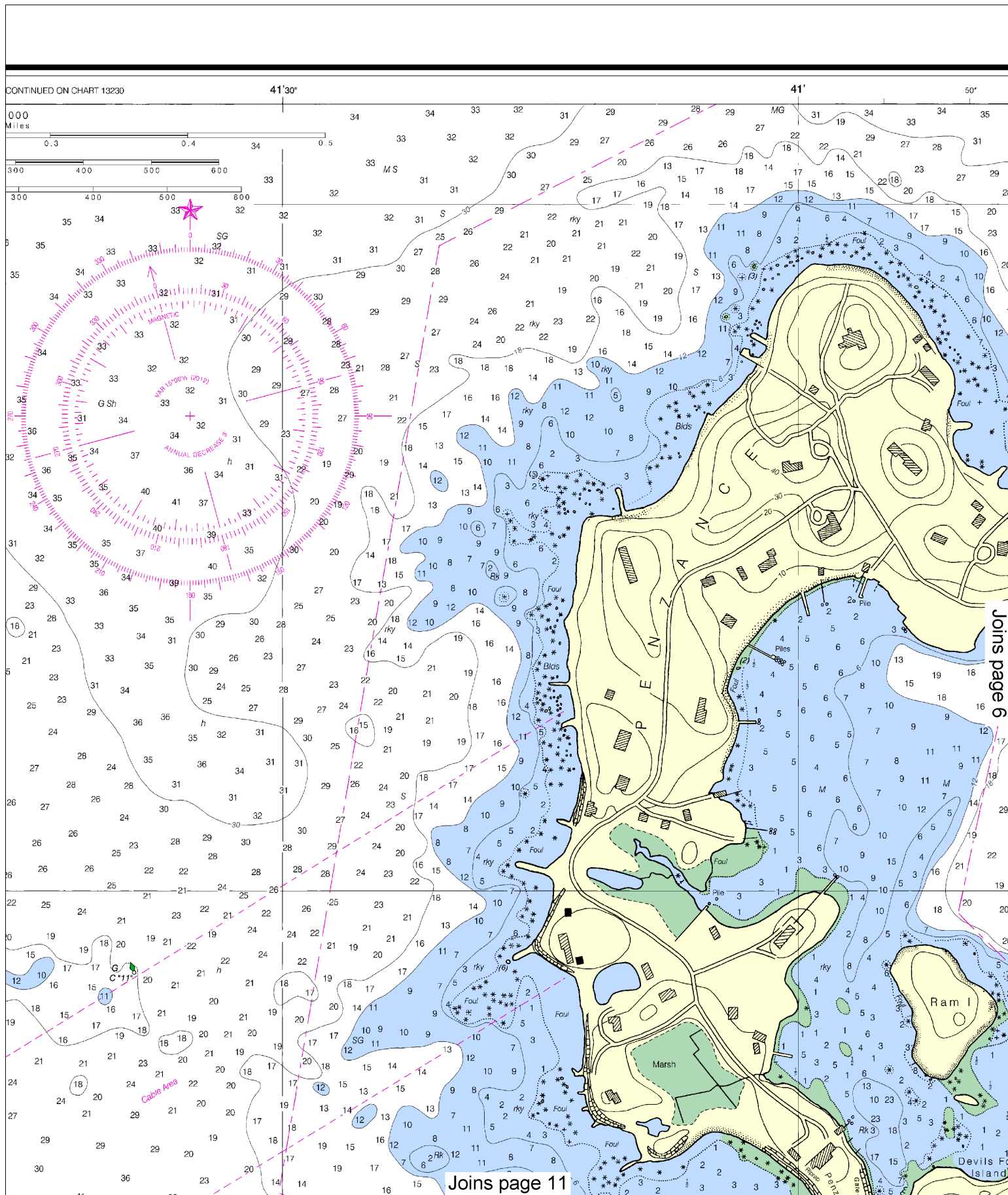
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

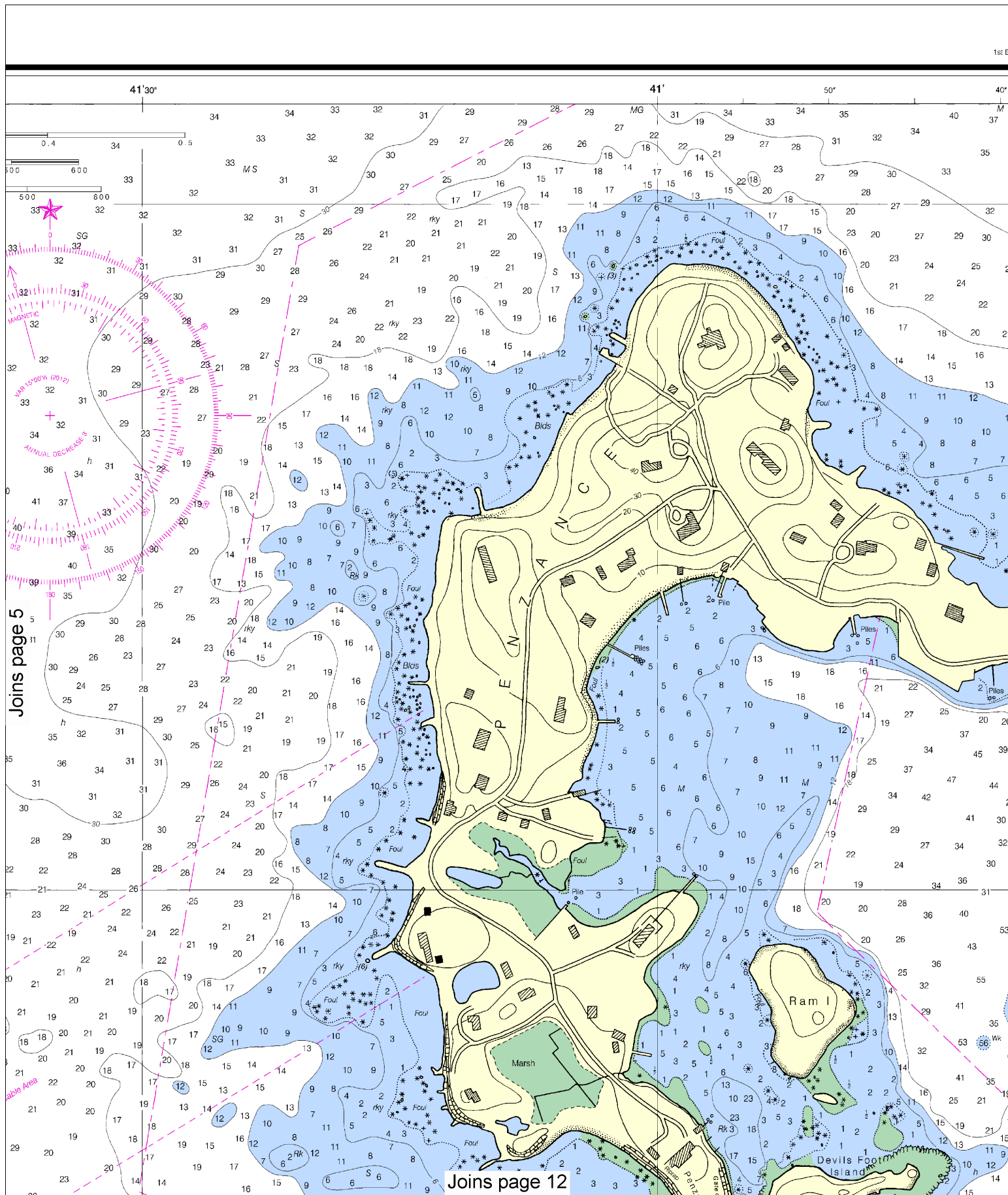
SCALE 1:5,000
0.5 Nautical Miles

See Note on page 5.





This BookletChart was reduced to 75% of the original chart scale.
The new scale is 1:6667. Barscales have also been reduced and
are accurate when used to measure distances in this BookletChart.



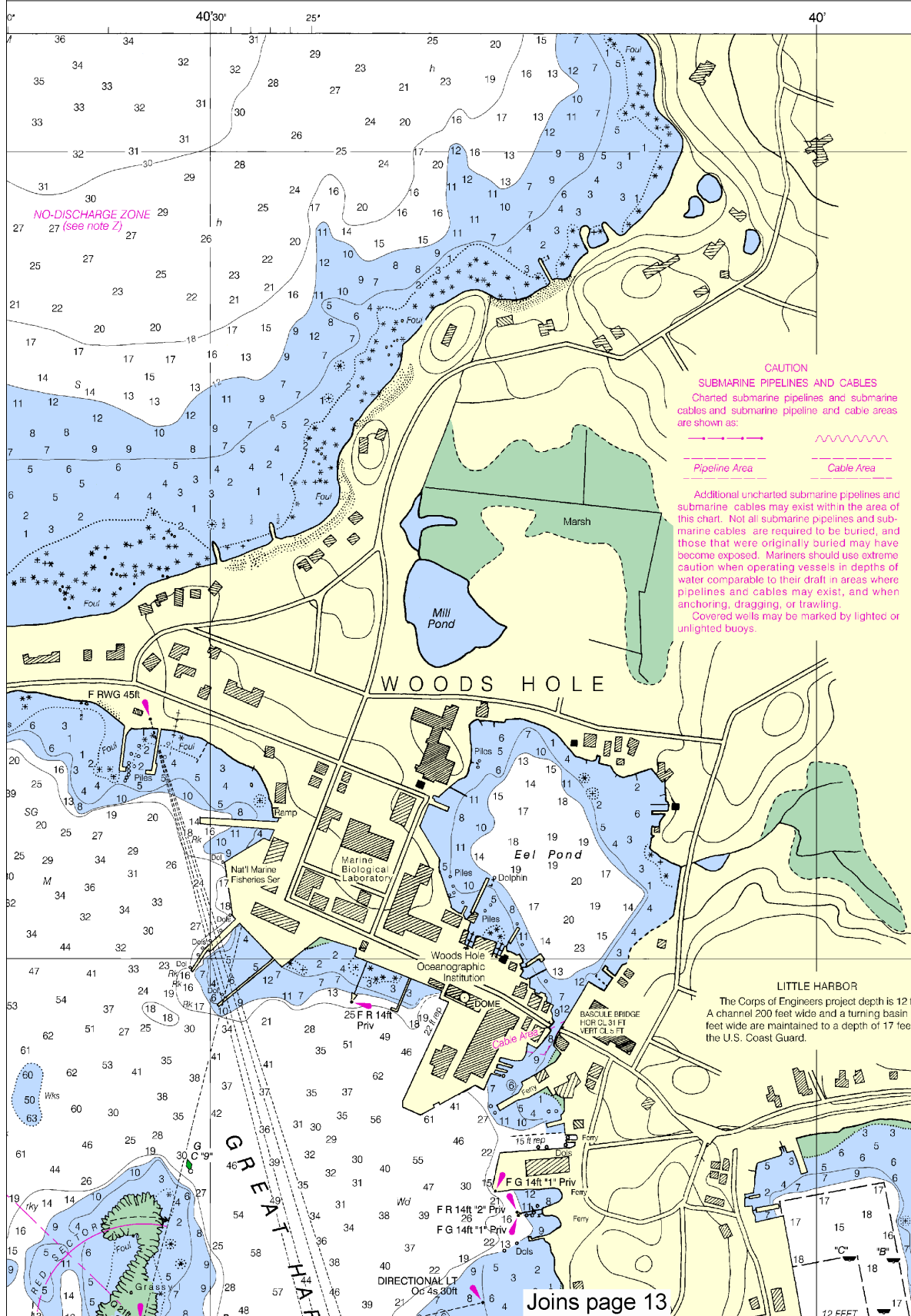
6

Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:5,000

See Note on page 5.



NOTE Z
NO-DISCHARGE ZONE, 40 CFR 140
 Under the Clean Water Act, Section 312, all vessels operating within a No-Discharge Zone (NDZ) are completely prohibited from discharging any sewage, treated or untreated, into the waters. All vessels with an installed marine sanitation device (MSD) that are navigating, moored, anchored, or docked within a NDZ must have the MSD disabled to prevent the overboard discharge of sewage (treated or untreated) or install a holding tank. Regulations for the NDZ are contained in the U.S. Coast Pilot. Additional information concerning the regulations and requirements may be obtained from the Environmental Protection Agency (EPA) web site: http://www.epa.gov/owow/oceans/regulatory/vessel_sewage/.

HORIZONTAL DATUM
 The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.393' northward and 1.889' eastward to agree with this chart.

CAUTION
 Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.
 During some winter months or when endangered by ice, certain aids to navigation are replaced by other types or removed. For details see U.S. Coast Guard Light List.

SUPPLEMENTAL INFORMATION
 Consult U.S. Coast Pilot 2 for important supplemental information.

AIDS TO NAVIGATION
 Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

WARNING
 The prudent mariner will not rely solely on any single aid to navigation, particularly floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

CAUTION
 Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

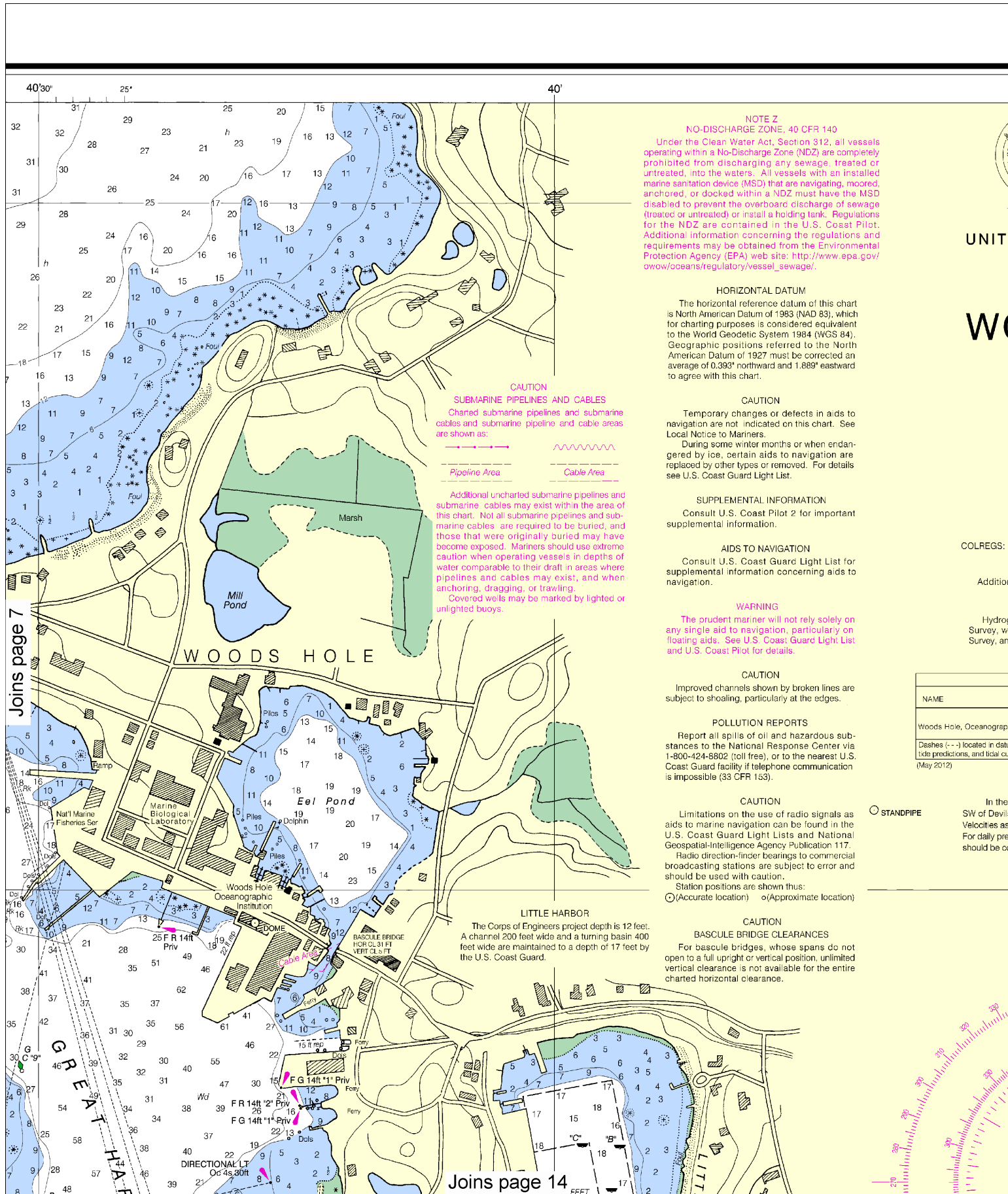
POLLUTION REPORTS
 Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

CAUTION
 Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.
 Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.
 Station positions are shown thus:
 (●) (Accurate location) (○) (Approximate location)

CAUTION
BASCULE BRIDGE CLEARANCES
 For bascule bridges, whose spans do not open to a full upright or vertical position, unlimited vertical clearance is not available for the entire charted horizontal clearance.

Joins page 8

Joins page 13



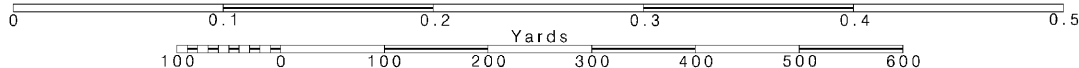
8

Note: Chart grid lines are aligned with true north.

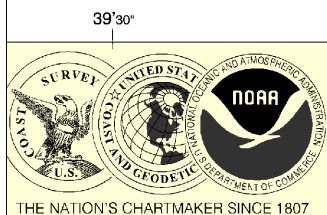
Printed at reduced scale.

SCALE 1:5,000
 0.5 Nautical Miles

See Note on page 5.



SOUNDINGS IN FEET



UNITED STATES - EAST COAST
MASSACHUSETTS

WOODS HOLE

Mercator Projection
Scale 1:5,000 at Lat. 41°31'

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FEET
AT MEAN LOWER LOW WATER

HEIGHTS
Heights in feet above Mean High Water.

For Symbols and Abbreviations see Chart No. 1

International Regulations for Preventing Collisions at Sea, 1972.
Demarcation lines are shown thus: — — — — —

Additional information can be obtained at nauticalcharts.noaa.gov.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast and Geodetic Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

TIDAL INFORMATION

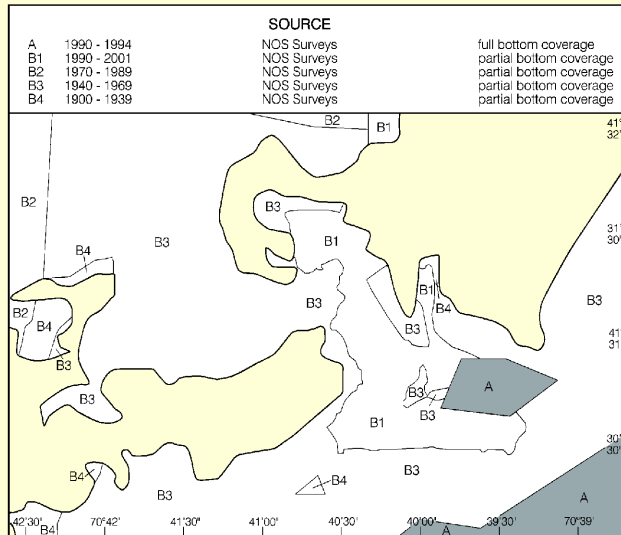
PLACE (LAT/LONG)	Height referred to datum of soundings (MLLW)		
	Mean Higher High Water	Mean High Water	Mean Low Water
	feet	feet	feet
Hydrographic Institution (41°31'N/70°40'W)	2.2	1.9	0.1

Datum columns indicate unavalable datum values for a tide station. Real-time water levels, current predictions are available on the Internet from <http://tidesandcurrents.noaa.gov>.

WOODS HOLE CURRENT

In the narrow part of Woods Hole Passage (Woods Hole, 0.1 mile from Foot Island) the current velocity at times exceeds 4.5 knots, as high as 5.0 knots have been reported by the U.S. Coast Guard. Predictions of the current, the Tidal Current Tables, Atlantic Coast consulted.

Dec 2007



SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, *United States Coast Pilot*.

NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Hyannis, MA KEC-73 162.550 MHz
Providence, RI WXJ-39 162.400 MHz

RADAR REFLECTORS

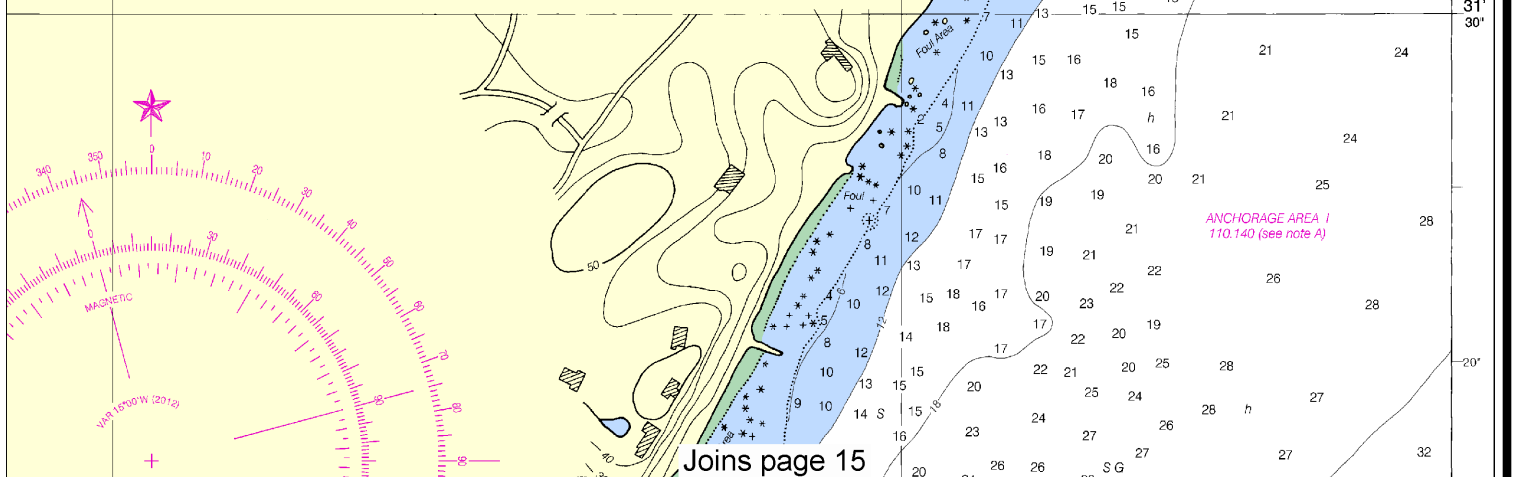
Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

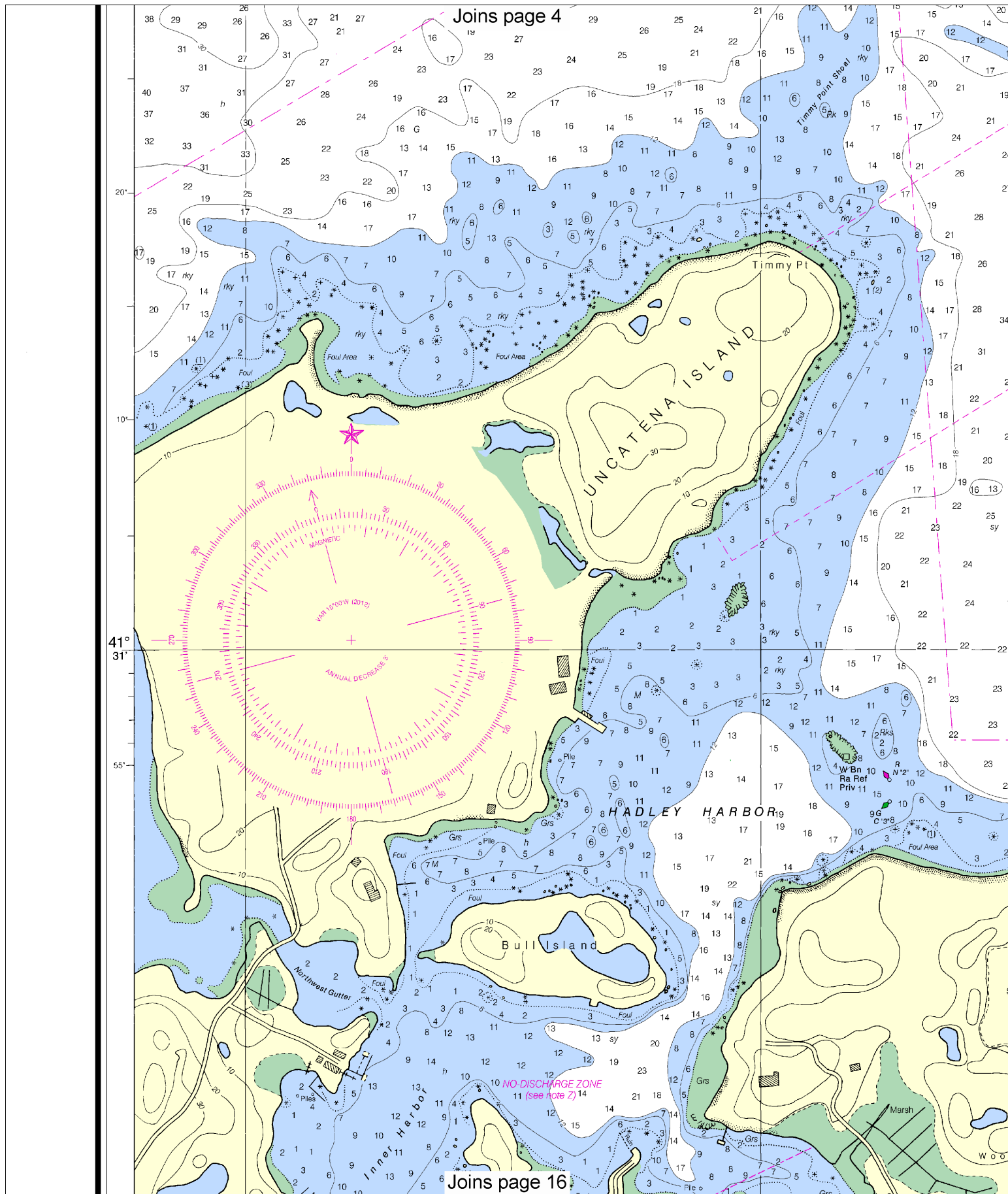
CAUTION

Mariners are warned to stay clear of the protective riprap surrounding navigational light structures shown thus: *

FISH TRAP AREAS

Boundary lines of fish trap areas are shown thus: — — — — —
Submerged piling may exist in these areas.





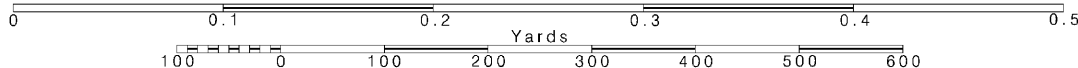
10

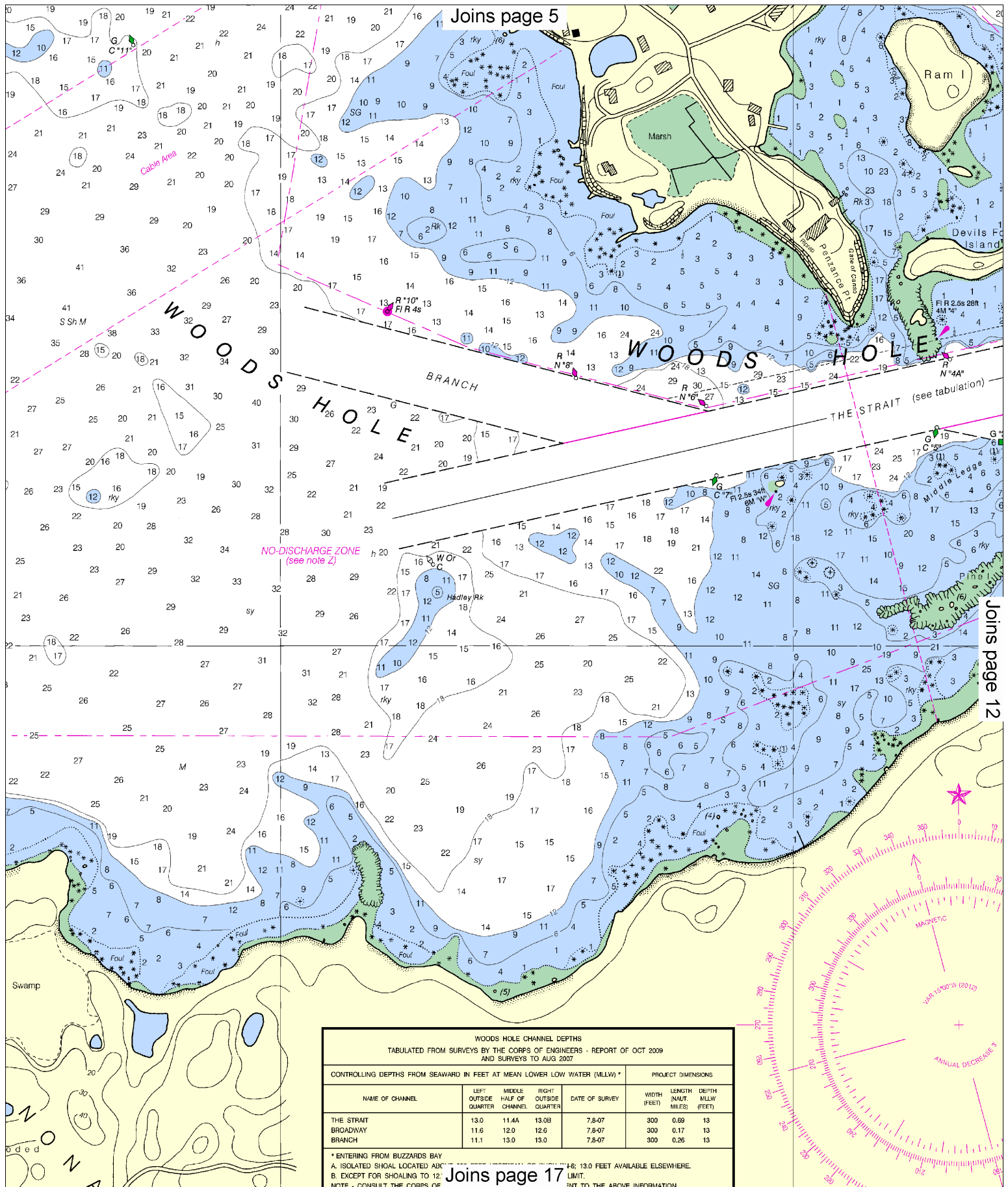
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

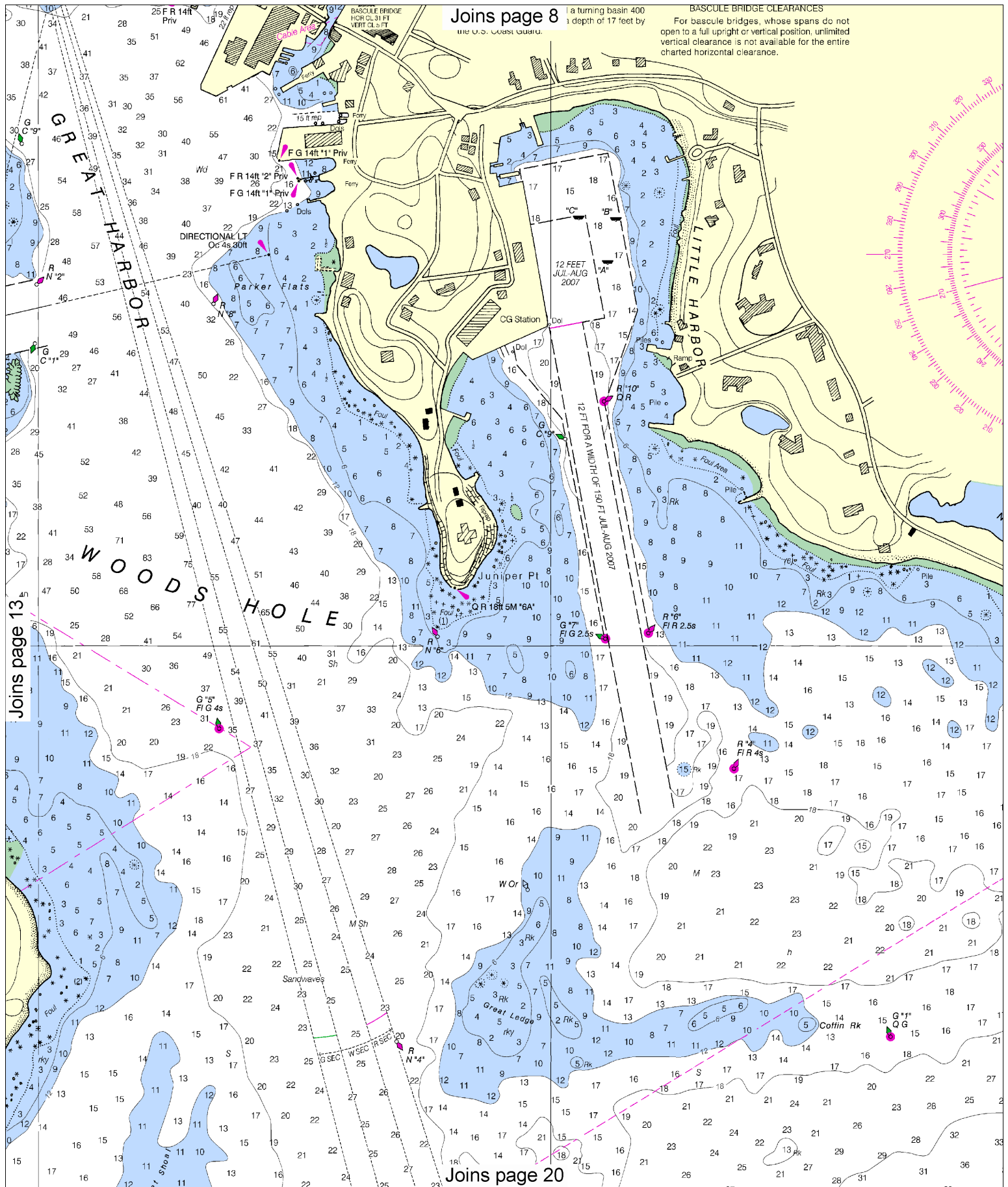
SCALE 1:5,000
0.5 Nautical Miles

See Note on page 5.









Joins page 13

Joins page 8

Joins page 20

14

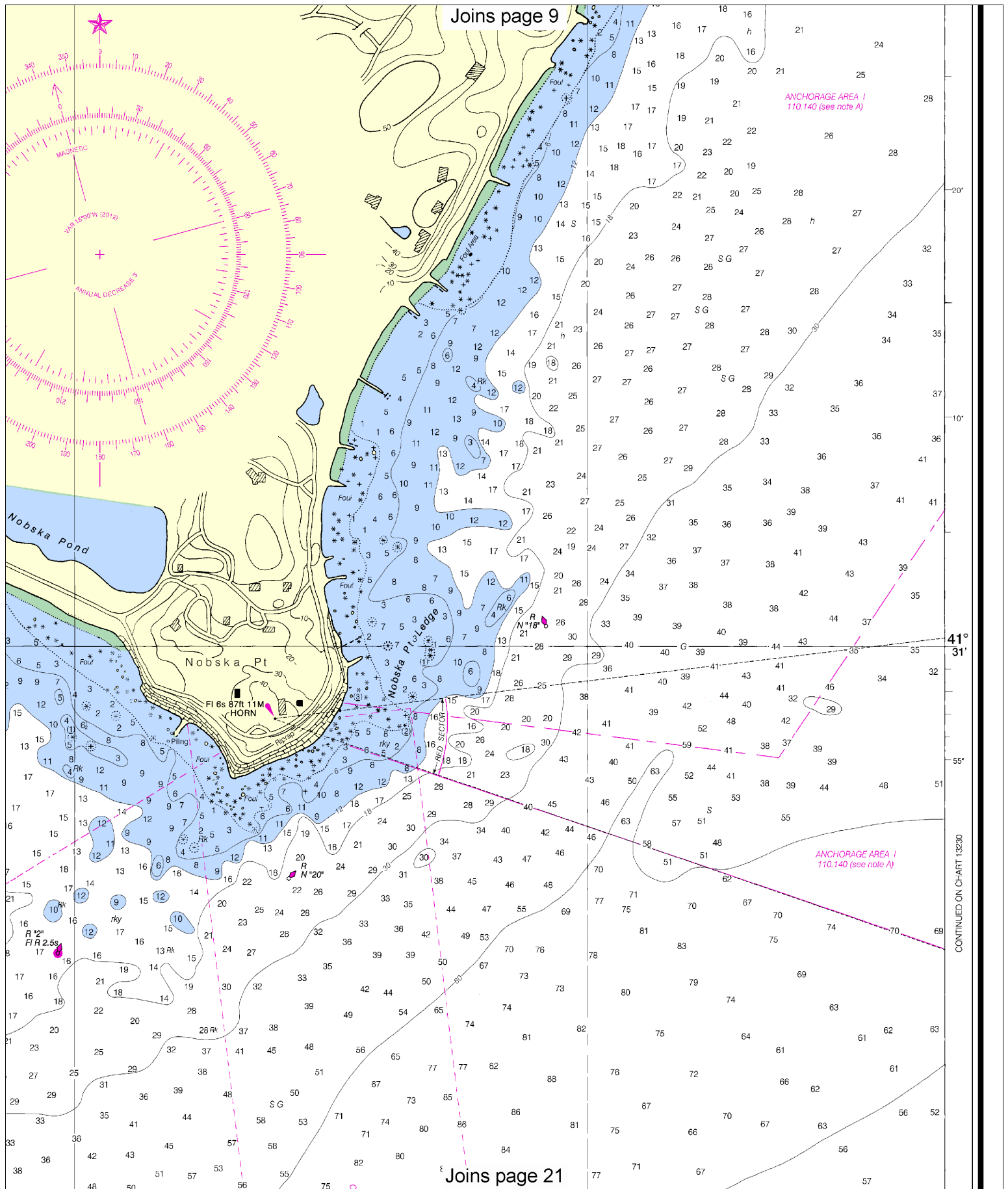
Note: Chart grid lines are aligned with true north.

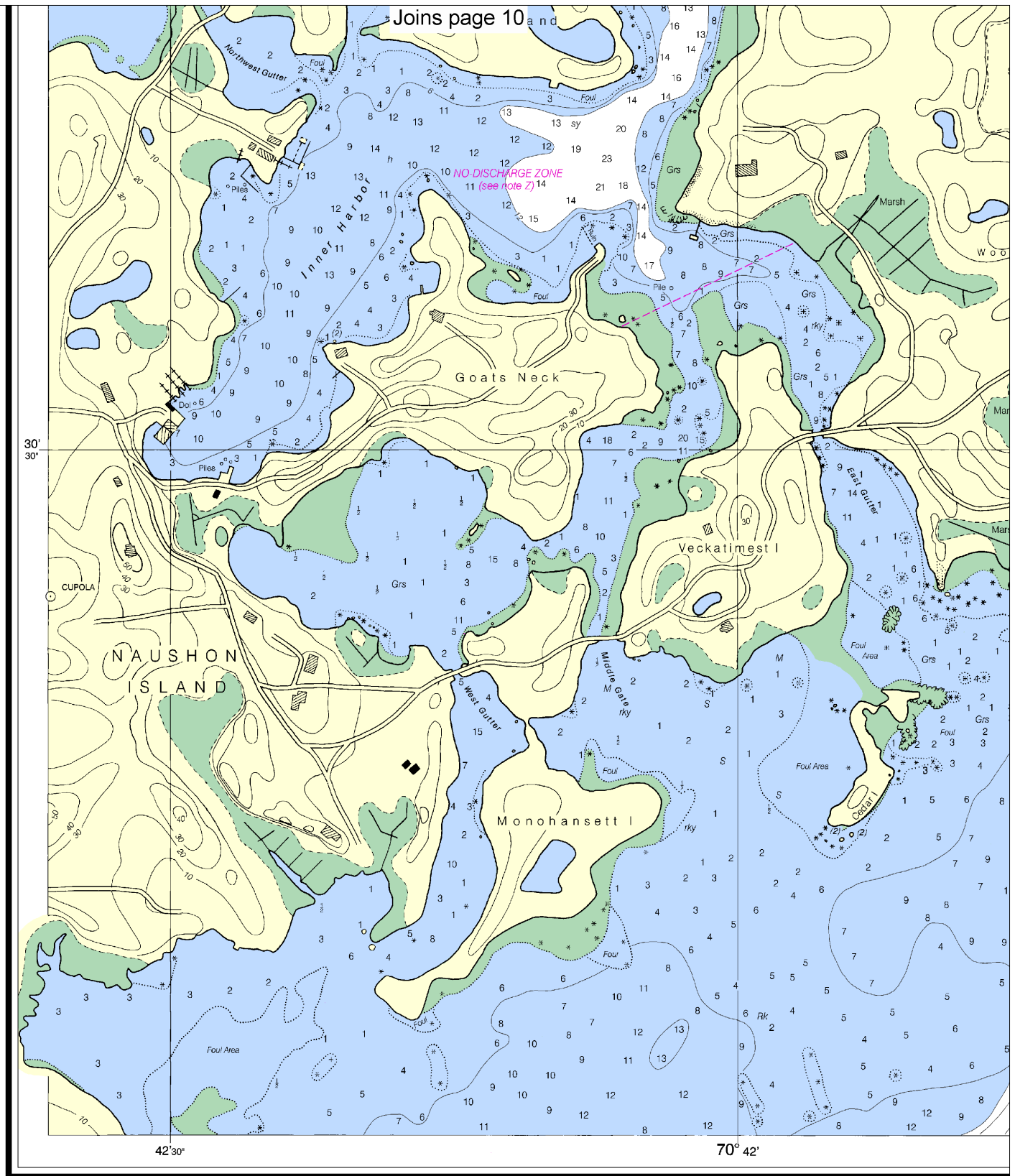
Printed at reduced scale.

SCALE 1:5,000
0.5 Nautical Miles

See Note on page 5.







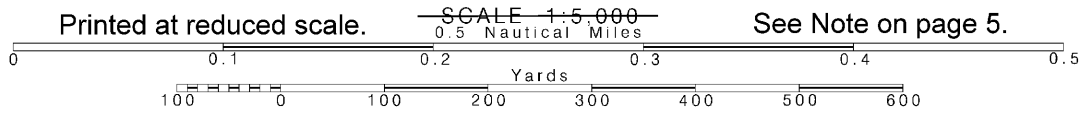
7th Ed., Jul. / 12 ■ Corrected through NM Jul. 7/12
 Corrected through LNM Jun. 26/12

13235

CAUTION
 This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at nauticalcharts.noaa.gov.

This nautical chart has been designed to promote Ocean Service encourages users to submit corrections improving this chart to the Chief, Marine Chart Division, NOAA, Silver Spring, Maryland 20910-3282.

Note: Chart grid lines are aligned with true north.

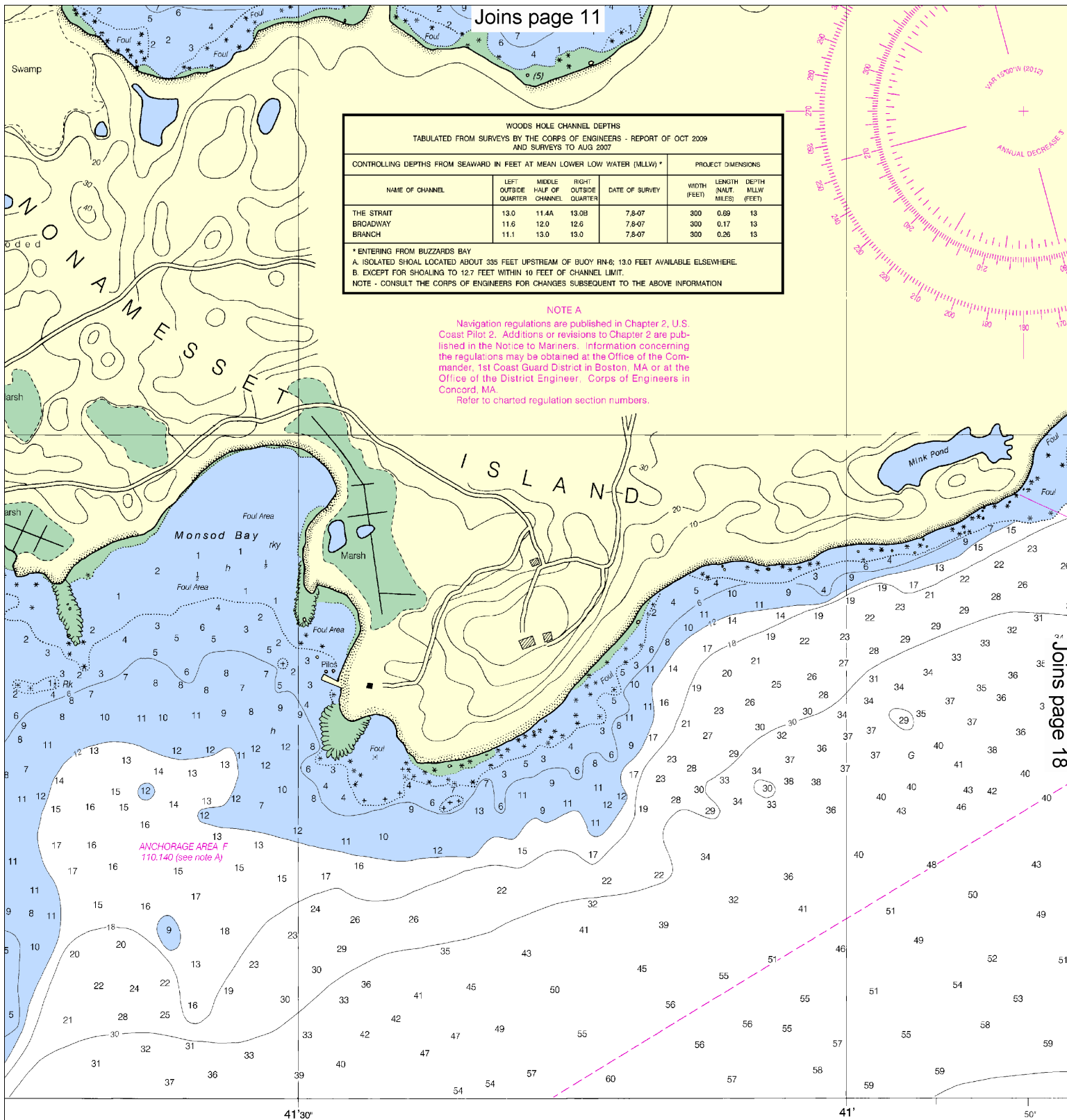


See Note on page 5.

WOODS HOLE CHANNEL DEPTHS							
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF OCT 2009 AND SURVEYS TO AUG 2007							
CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW) *				PROJECT DIMENSIONS			
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH (FEET)
THE STRAIT	13.0	11.4A	13.0B	7.8-07	300	0.69	13
BROADWAY	11.6	12.0	12.6	7.8-07	300	0.17	13
BRANCH	11.1	13.0	13.0	7.8-07	300	0.26	13

* ENTERING FROM BUZZARDS BAY
A. ISOLATED SHOAL LOCATED ABOUT 335 FEET UPSTREAM OF BUOY RN-6; 13.0 FEET AVAILABLE ELSEWHERE.
B. EXCEPT FOR SHOALING TO 12.7 FEET WITHIN 10 FEET OF CHANNEL LIMIT.
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

NOTE A
Navigation regulations are published in Chapter 2, U.S. Coast Pilot 2. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 1st Coast Guard District in Boston, MA or at the Office of the District Engineer, Corps of Engineers in Concord, MA.
Refer to charted regulation section numbers.



For safe navigation. The National Ocean Service, or comments for the National Ocean Service (N/CS2), National Ocean Service.

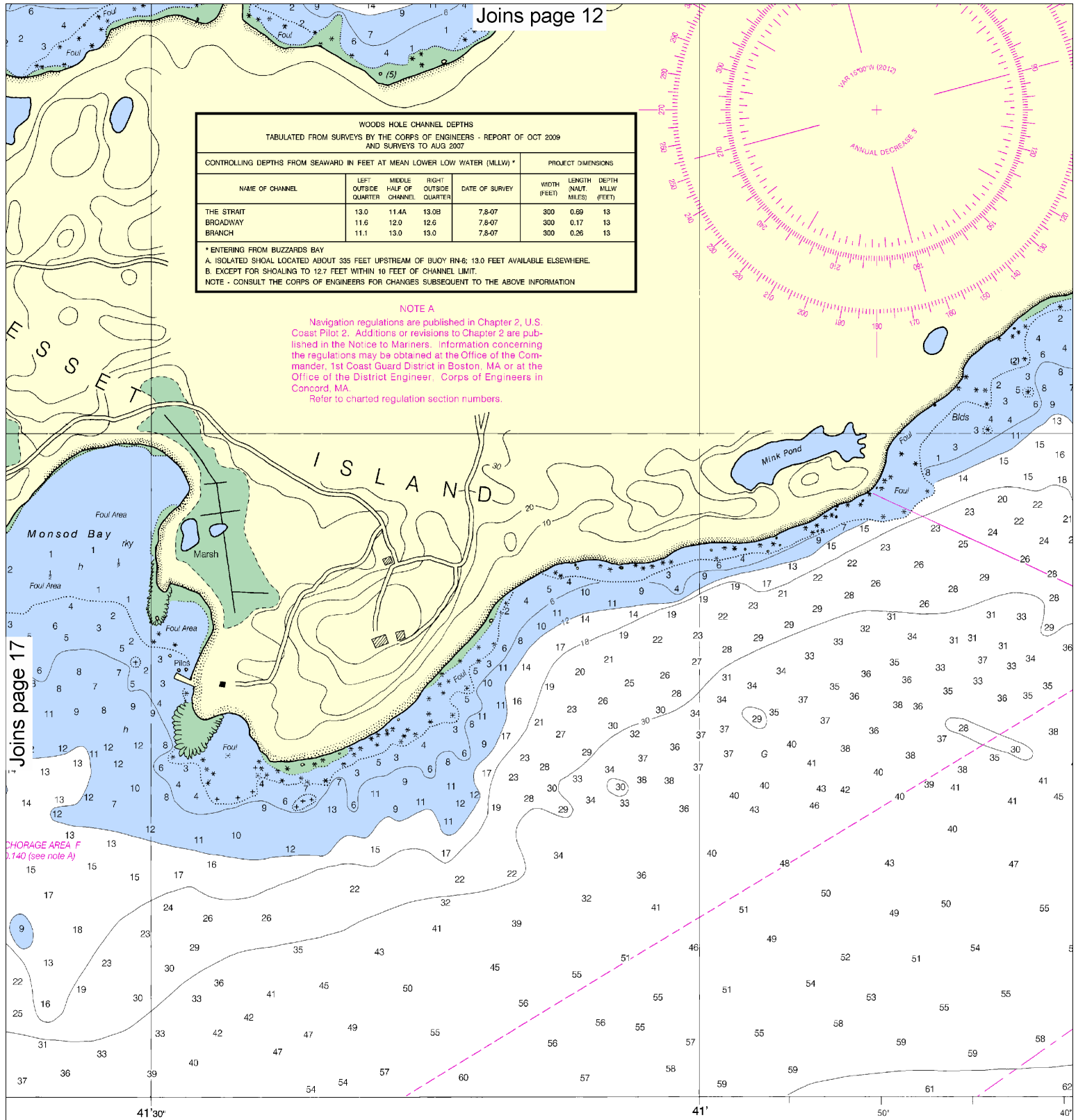
SOUNDINGS IN FEET

WOODS HOLE CHANNEL DEPTHS						
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF OCT 2009 AND SURVEYS TO AUG 2007						
CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW) *				PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	DEPTH (NAUT. MILES) MLLW (FEET)
THE STRAIT	13.0	11.4A	13.0B	7.8-07	300	0.69 13
BROADWAY	11.6	12.0	12.6	7.8-07	300	0.17 13
BRANCH	11.1	13.0	13.0	7.8-07	300	0.26 13

* ENTERING FROM BUZZARDS BAY.
A. ISOLATED SHOAL LOCATED ABOUT 335 FEET UPSTREAM OF BUOY RN-6; 13.0 FEET AVAILABLE ELSEWHERE.
B. EXCEPT FOR SHOALING TO 12.7 FEET WITHIN 10 FEET OF CHANNEL LIMIT.
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

NOTE A

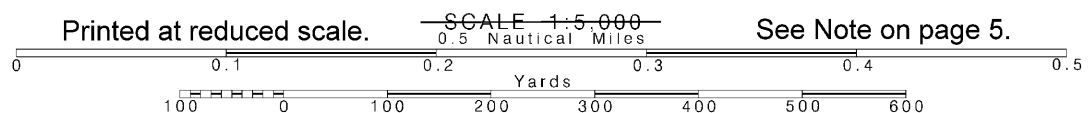
Navigation regulations are published in Chapter 2, U.S. Coast Pilot 2. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 1st Coast Guard District in Boston, MA or at the Office of the District Engineer, Corps of Engineers in Concord, MA.
Refer to charted regulation section numbers.



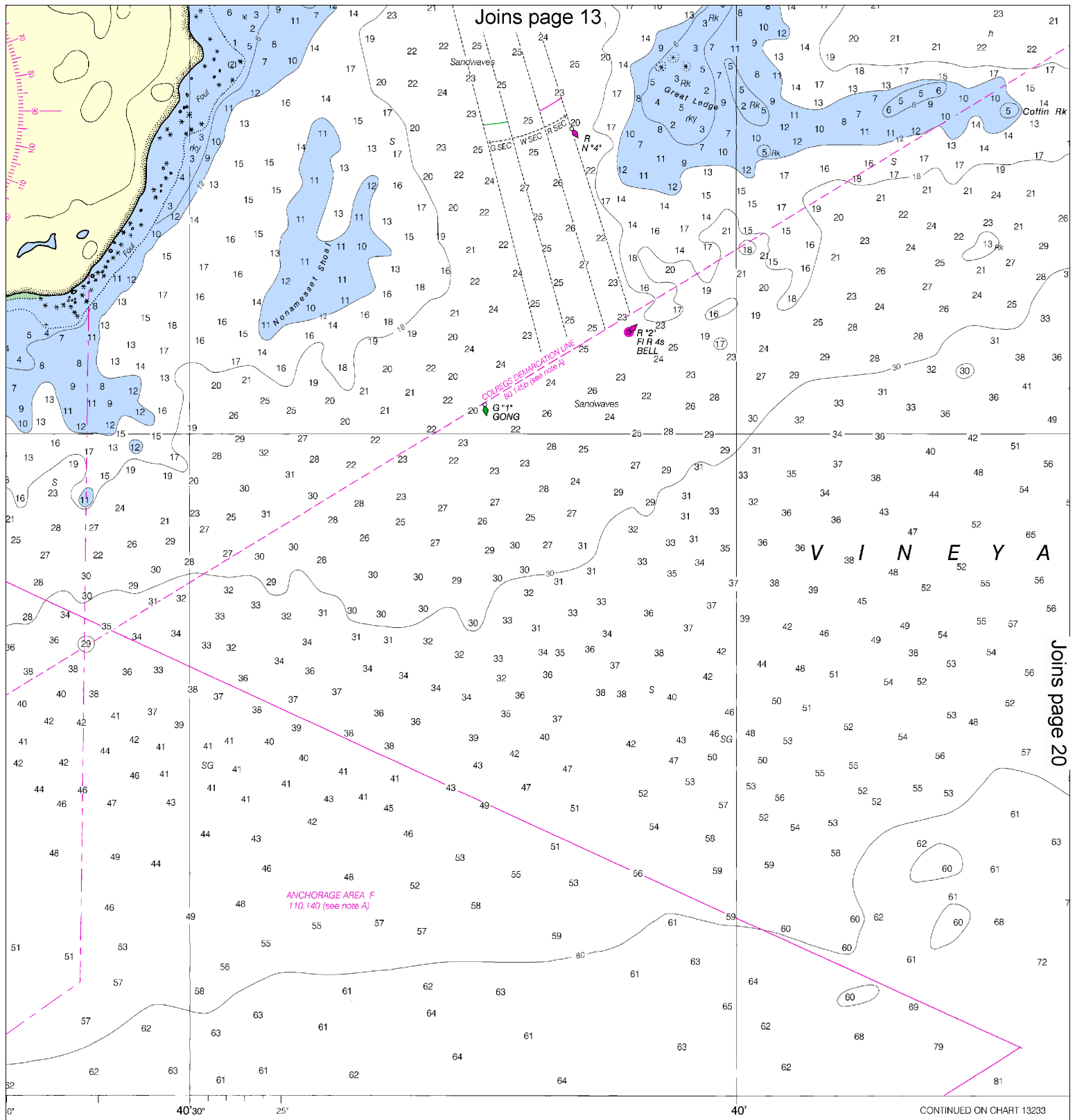
SOUNDINGS IN FEET

Published
U.S. DEPARTMENT OF
NATIONAL OCEANIC AND
ATMOSPHERIC
ADMINISTRATION
NATIONAL COAST GUARD

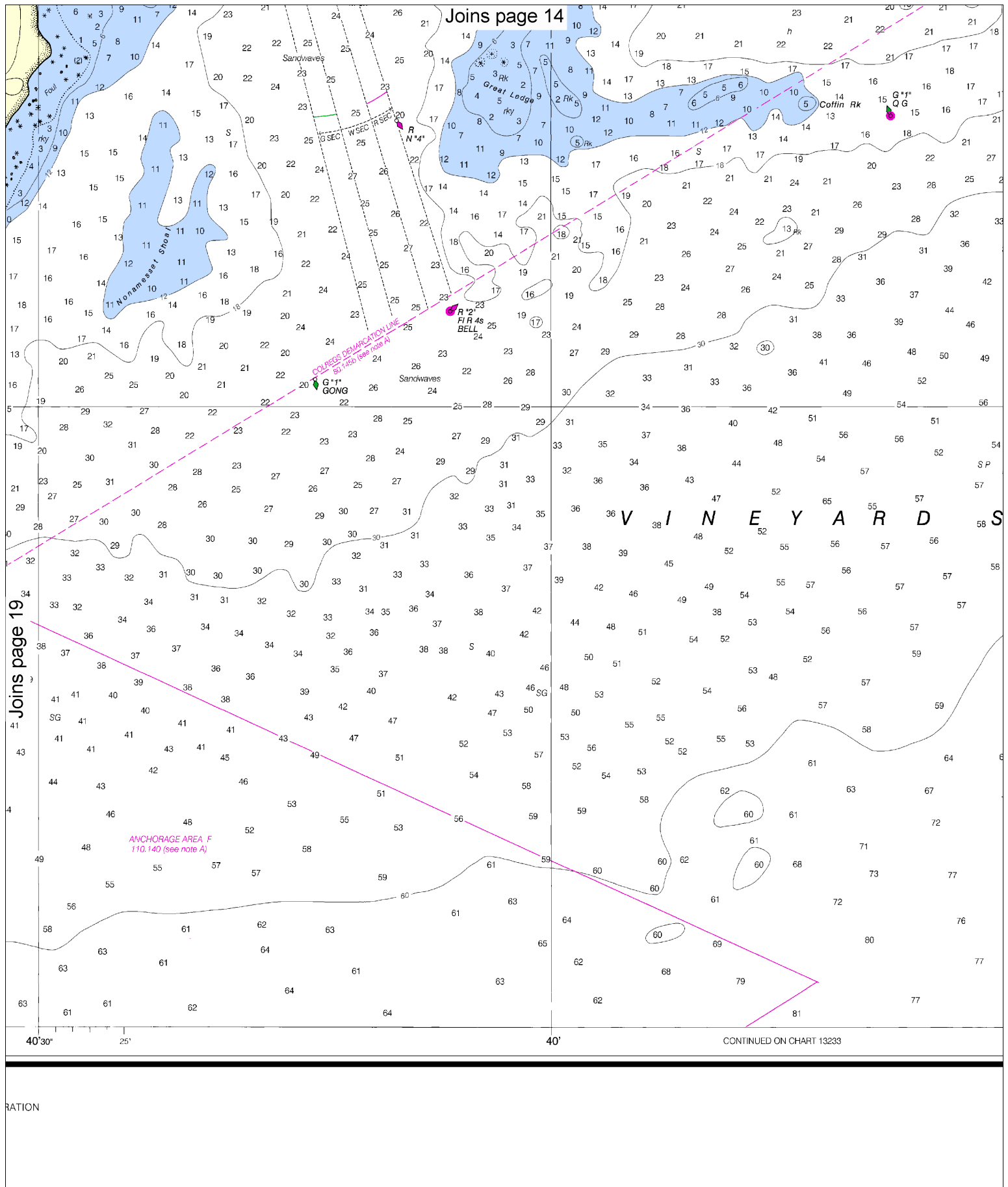
Note: Chart grid lines are aligned with true north.



See Note on page 5.

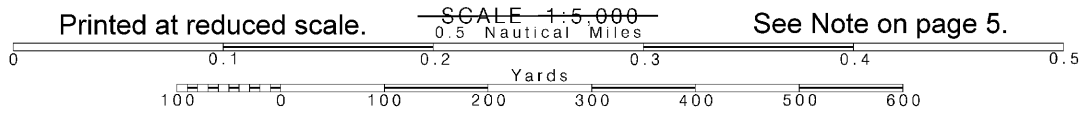


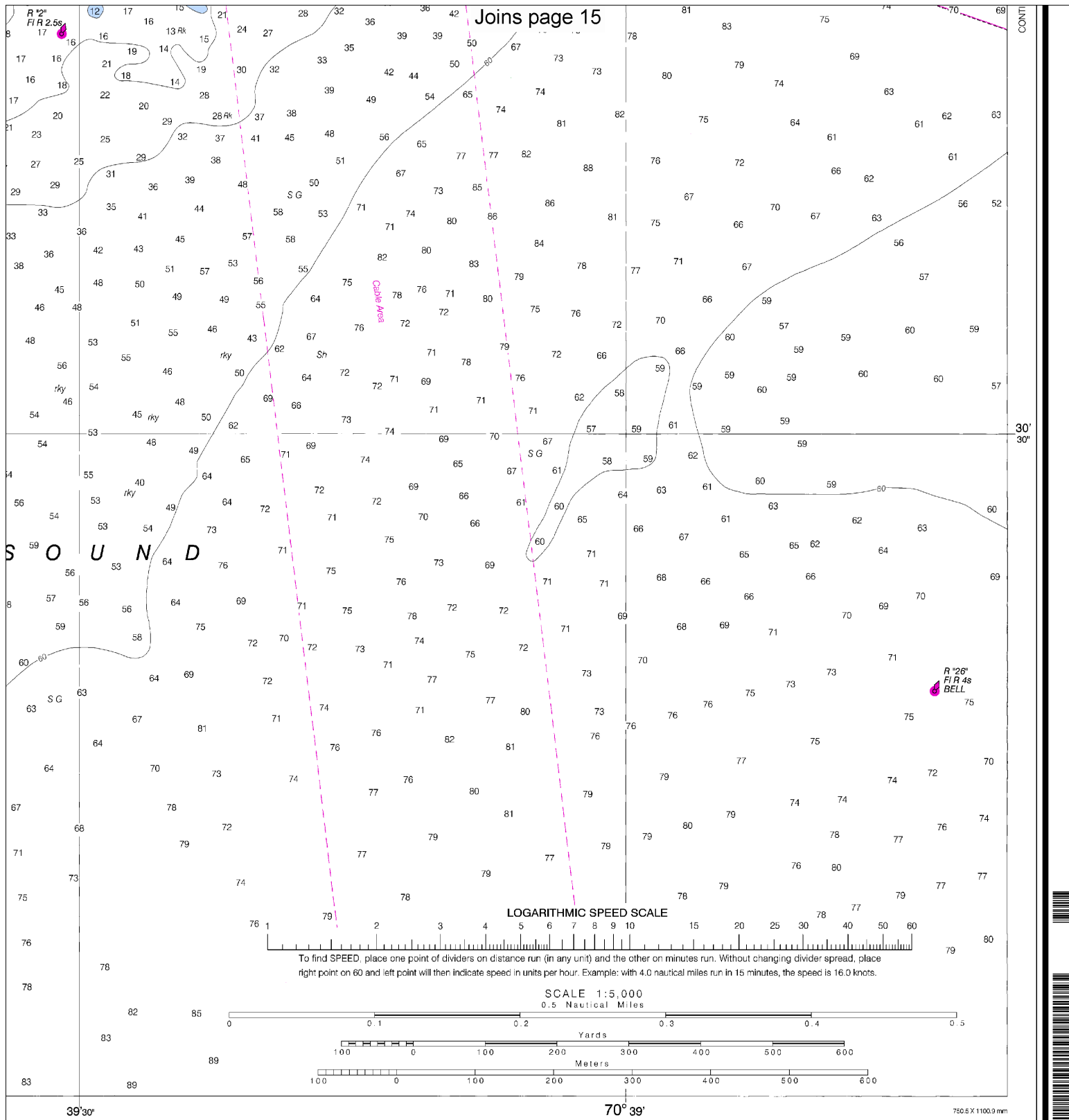
d at Washington, D.C.
 TMENT OF COMMERCE
 ND ATMOSPHERIC ADMINISTRATION
 AL OCEAN SERVICE
 OAST SURVEY



20

Note: Chart grid lines are aligned with true north.





FATHOMS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
FEET	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102
METERS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

Woods Hole
SOUNDINGS IN FEET - SCALE 1:5,000

13235



EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, and harbors.

Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other

vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

Channels 68, 69, 71, 72 and 78A – Recreational boat channels.

Getting and Giving Help — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

Distress Call Procedures

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- Release transmit button.
- Wait for 10 seconds — If no response Repeat MAYDAY call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!



NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.

<http://www.nws.noaa.gov/nwr/>

Quick References

Nautical chart related products and information	—	http://www.nauticalcharts.noaa.gov
Online chart viewer	—	http://www.nauticalcharts.noaa.gov/mcd/NOAAChartViewer.html
Report a chart discrepancy	—	http://ocsddata.ncd.noaa.gov/idrs/discrepancy.aspx
Chart and chart related inquiries and comments	—	http://ocsddata.ncd.noaa.gov/idrs/inquiry.aspx?frompage=ContactUs
Chart updates (LNM and NM corrections)	—	http://www.nauticalcharts.noaa.gov/mcd/updates/LNM_NM.html
Coast Pilot online	—	http://www.nauticalcharts.noaa.gov/nsd/cpdownload.htm
Tides and Currents	—	http://tidesandcurrents.noaa.gov
Marine Forecasts	—	http://www.nws.noaa.gov/om/marine/home.htm
National Data Buoy Center	—	http://www.ndbc.noaa.gov/
NowCoast web portal for coastal conditions	—	http://www.nowcoast.noaa.gov/
National Weather Service	—	http://www.weather.gov/
National Hurricane Center	—	http://www.nhc.noaa.gov/
Pacific Tsunami Warning Center	—	http://ptwc.weather.gov/
Contact Us	—	http://www.nauticalcharts.noaa.gov/staff/contact.htm



— For the latest news from Coast Survey, follow @nauticalcharts



This Booklet chart has been designed for duplex printing (printed on front and back of one sheet). If a duplex option is not available on your printer, you may print each sheet and arrange them back-to-back to allow for the proper layout when viewing.

NOAA's Office of Coast Survey



The Nation's Chartmaker